

Burn Baby Burn, or NOT

Energy Efficiency & Sustainability

Alaska Tribal Conference on
Environmental Management

Nov 6, 2012

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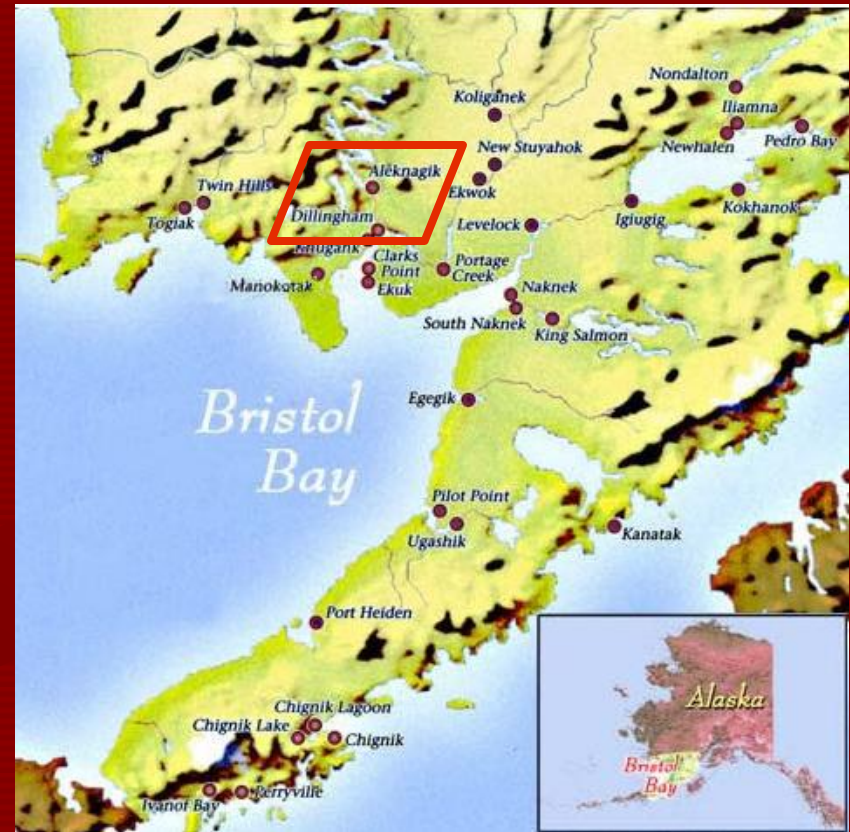
Tina Tinker, Aleknagik Traditional Council

Christopher Strub, BBNA

Are We Doing it Right?

- Are our wood and oil stoves efficient?
- Are we seasoning, storing and stacking our wood properly?
- Are we familiar with EPA certified stoves?
- What type and how much firewood are we burning?
- How far are we travelling to get firewood?

Project Location



Home Heating & Wood Harvest Survey Project

- *Purpose:* Collect information on home heating systems and practices with a focus on woodstoves, steam bath, and smoke houses
- *Collaboration* between:
 - Bristol Bay Native Association (Tribal Environmental, Energy and Forestry Programs)
 - Aleknagik Traditional Council
 - Alaska Native Tribal Health Consortium
 - Environmental Protection Agency

Project Steps

- *Survey Questionnaire* - drafted by project team & pre-tested
- *Quality Assurance Project Plan* - ensure data collected is valid and can be relied upon for its intended purpose
- *Survey Implementation* – completed 400 plus surveys with households (May-Oct 2012)
- *Input Data* – survey responses entered into excel spreadsheet (May-Oct 2012)
- *Analyze Data* – in progress
- *Report* – will include summary of findings & recommendations
- *Outreach* – community workshops, presentations

Wood Stoves We Encountered



Vigilant Stove-Vermont Castings



Country Earth Stove



Napoleon Wood Stove



Blaze King



Princess Blaze King



US Certified EPA Wood Stove

Wood Stoves (home made)



- Secondary chamber
- Energy efficient but does not have catalytic converter



- Made from repurposed materials

Other Stove's We Encountered



- This stove was the first that had a housing for the tea kettle.
- This one is a coal, oil, and wood stove.

Oil Stoves We Encountered

Burnham



Weil-McLain's

Slate Fins Furnace

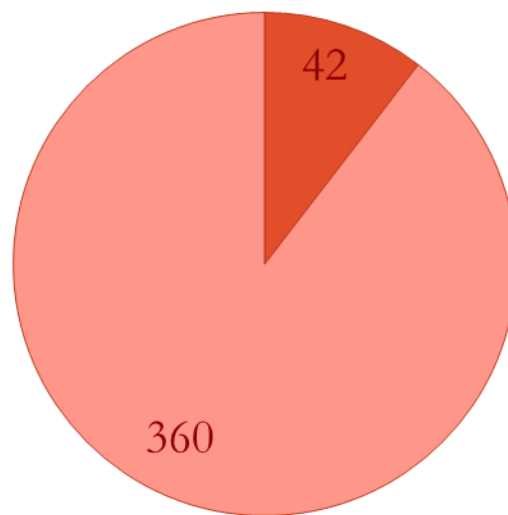


System 2000 Furnace

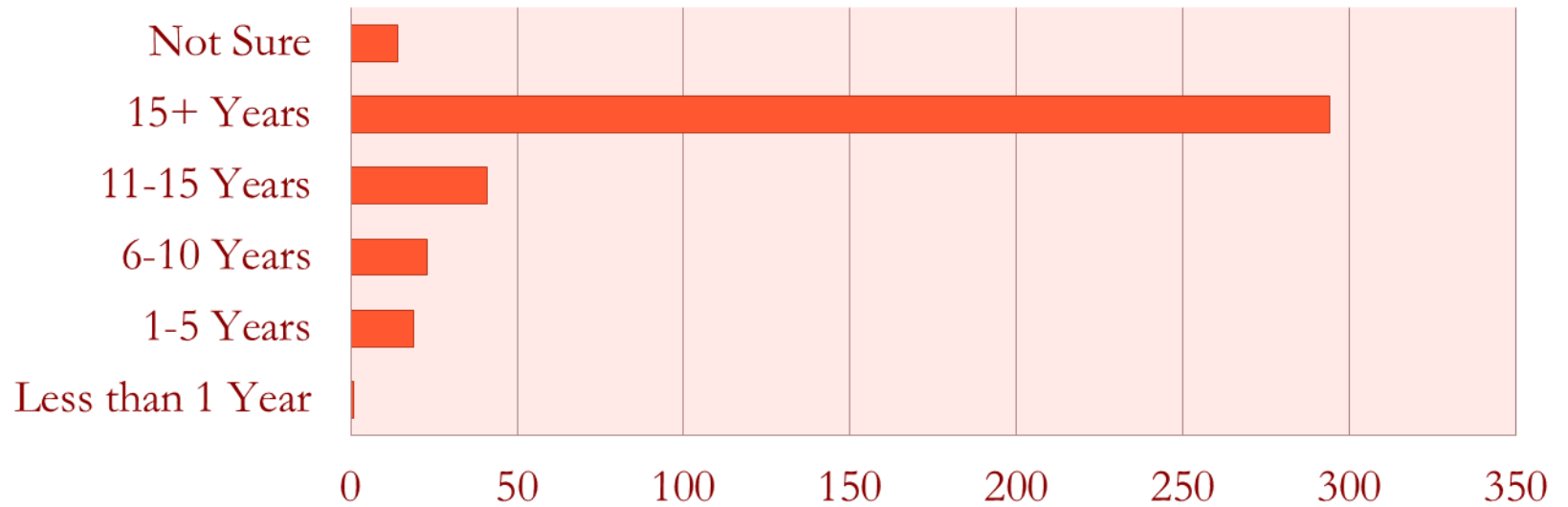
Survey Results

Home Locations

■ Aleknagik ■ Dillingham

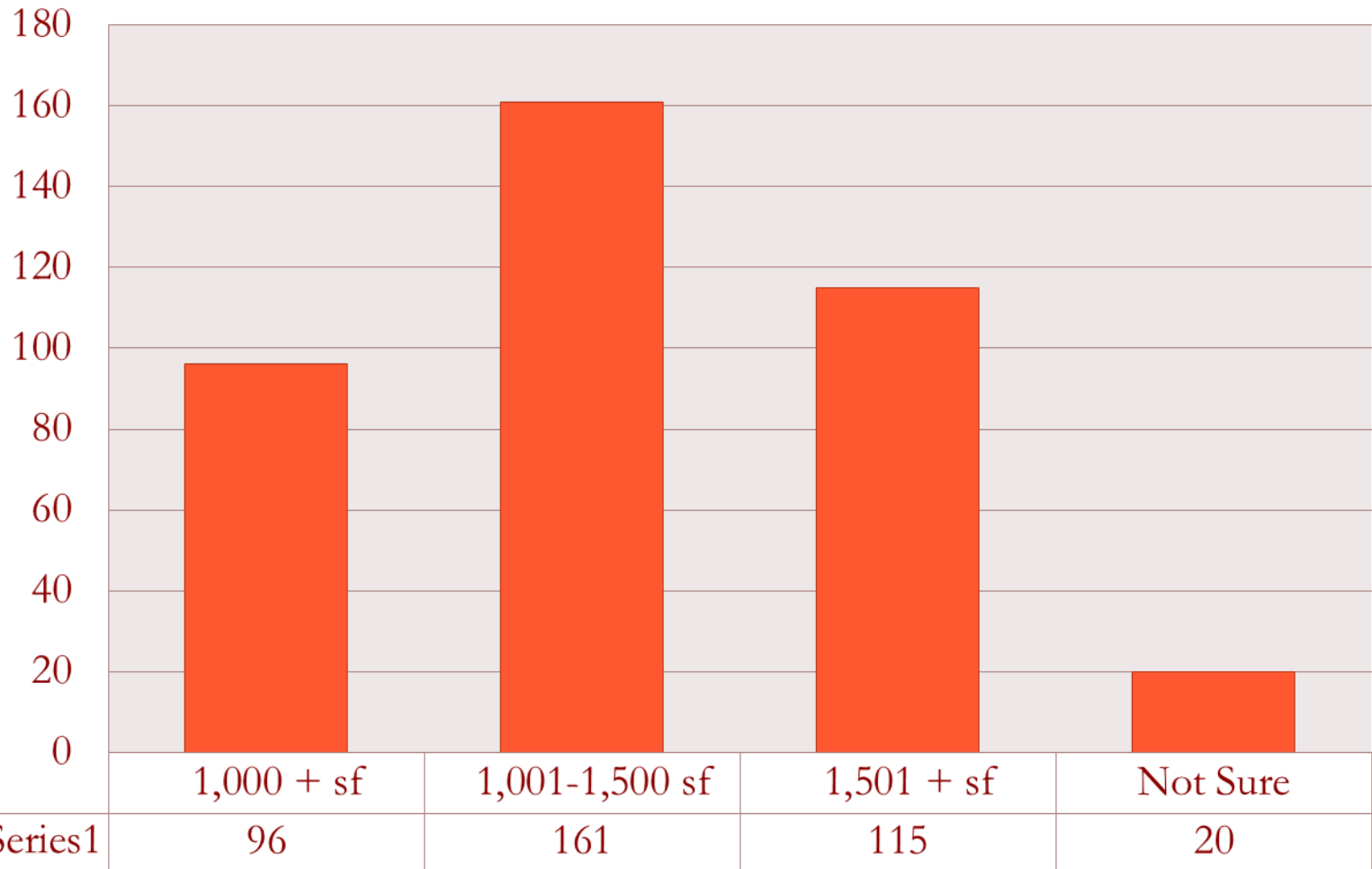


Age of Homes

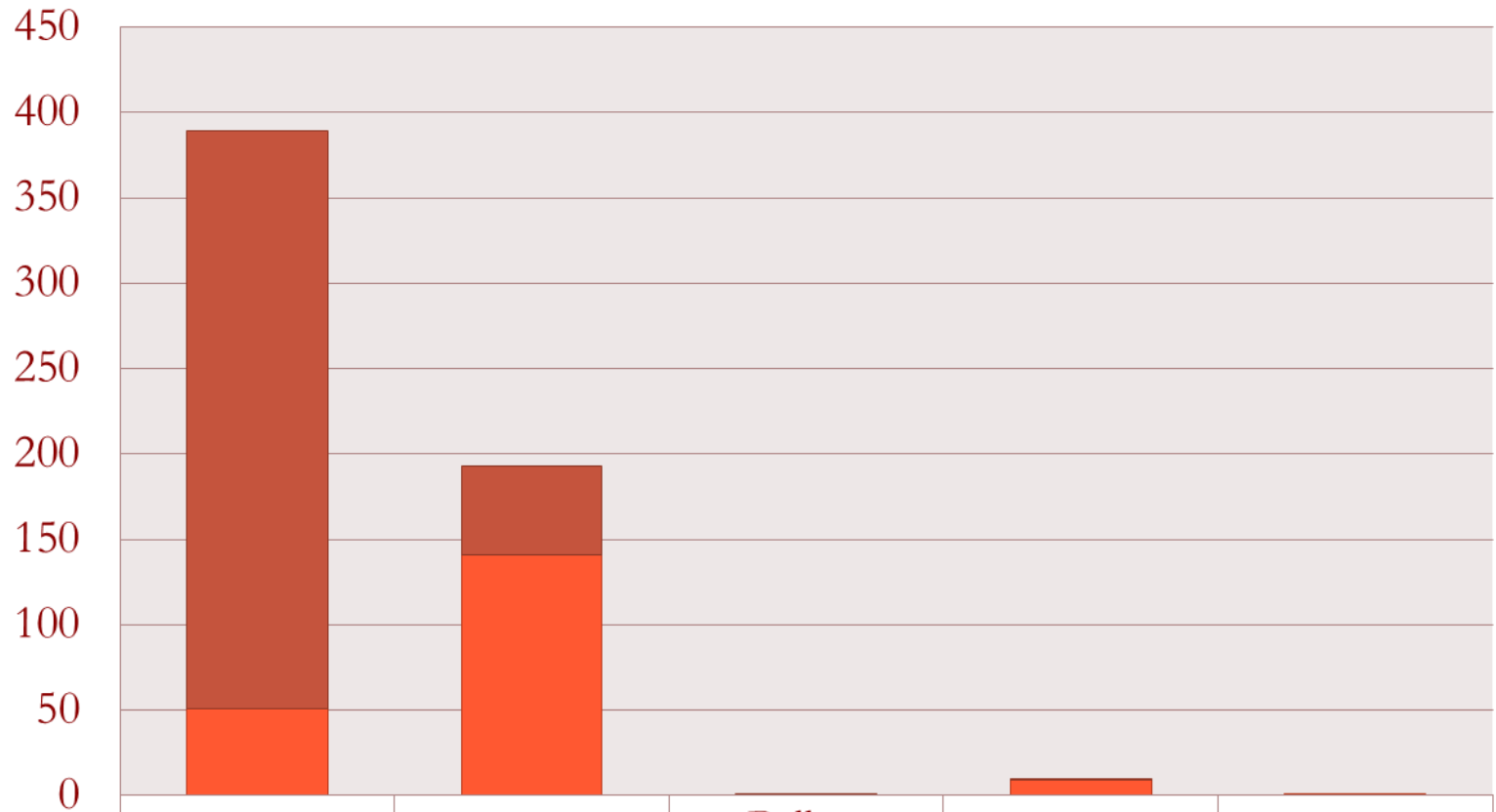


	Less than 1 Year	1-5 Years	6-10 Years	11-15 Years	15+ Years	Not Sure
Series1	1	19	23	41	294	14

Size of Homes

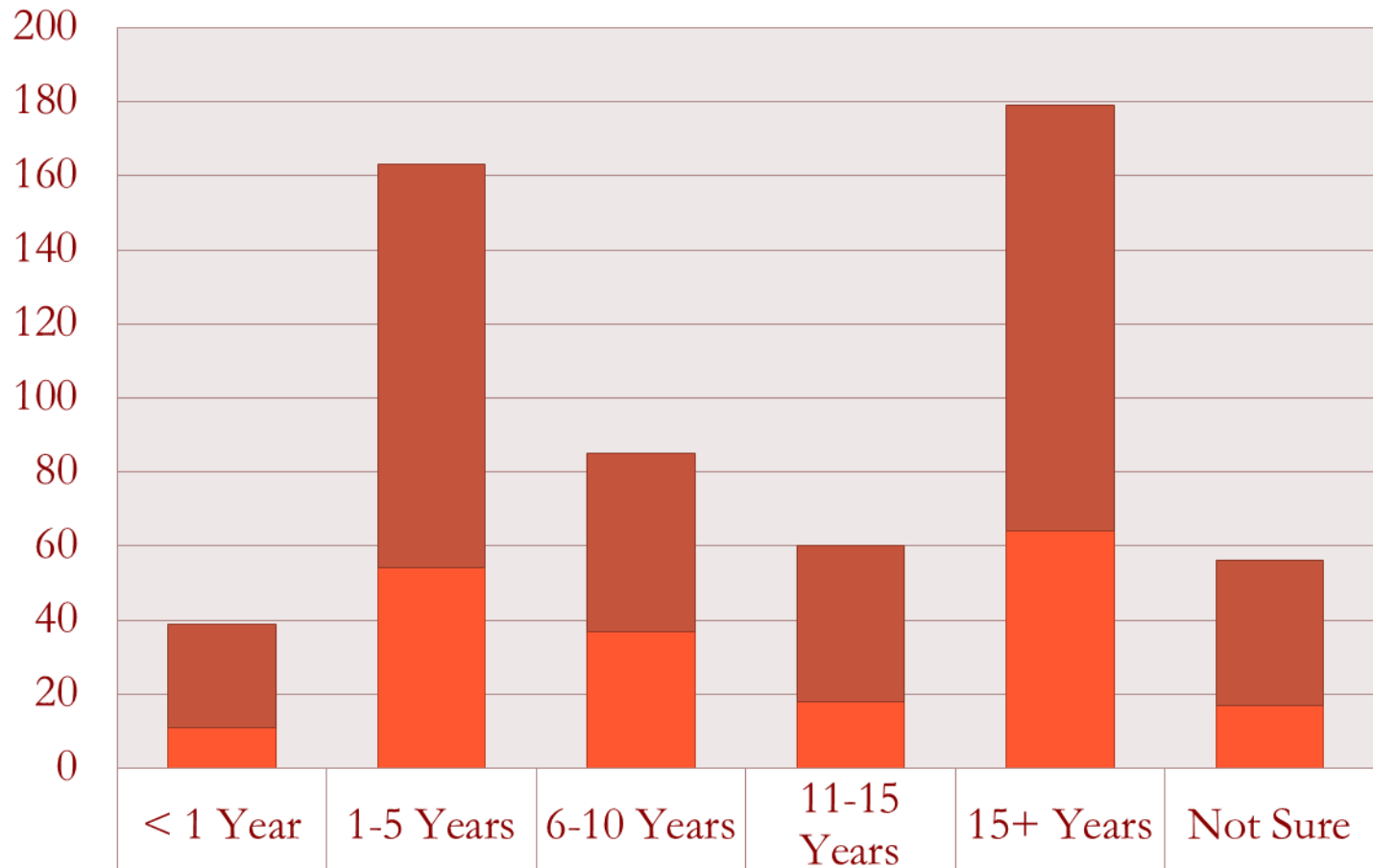


Primary & Secondary Heating Sources



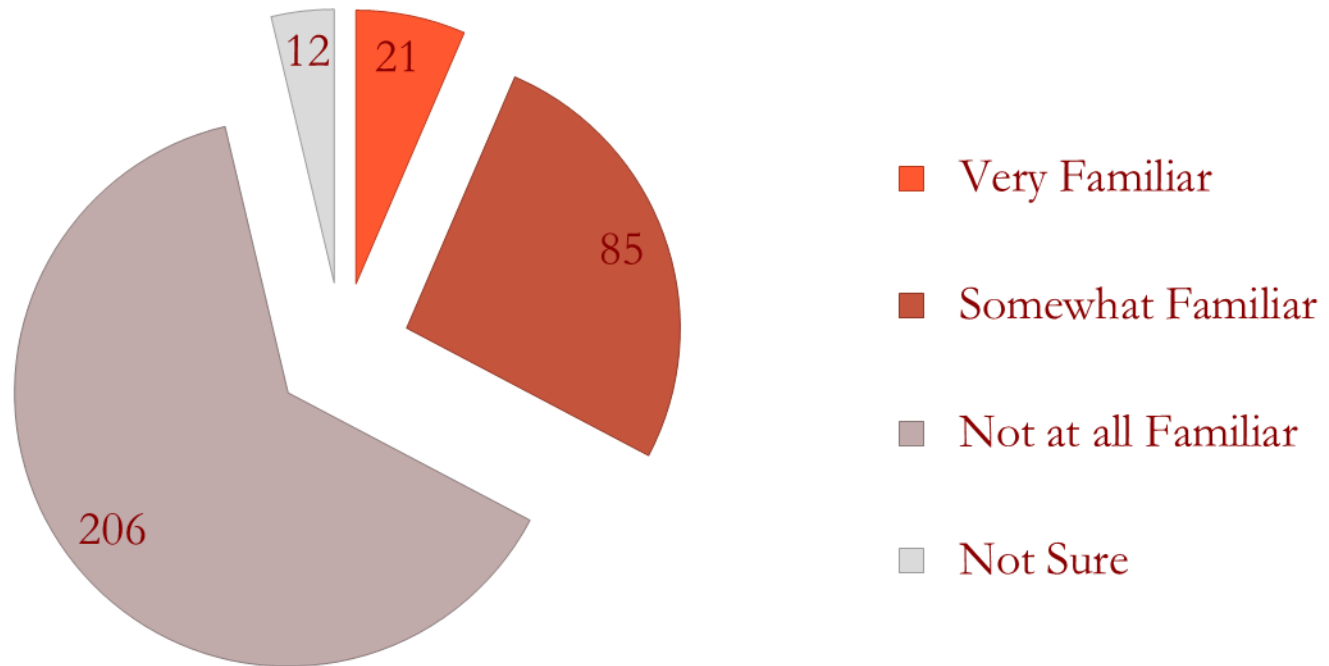
■ Primary	338	52	1	1	0
■ Secondary	51	141	0	9	1

Age of Primary & Secondary Heating Systems

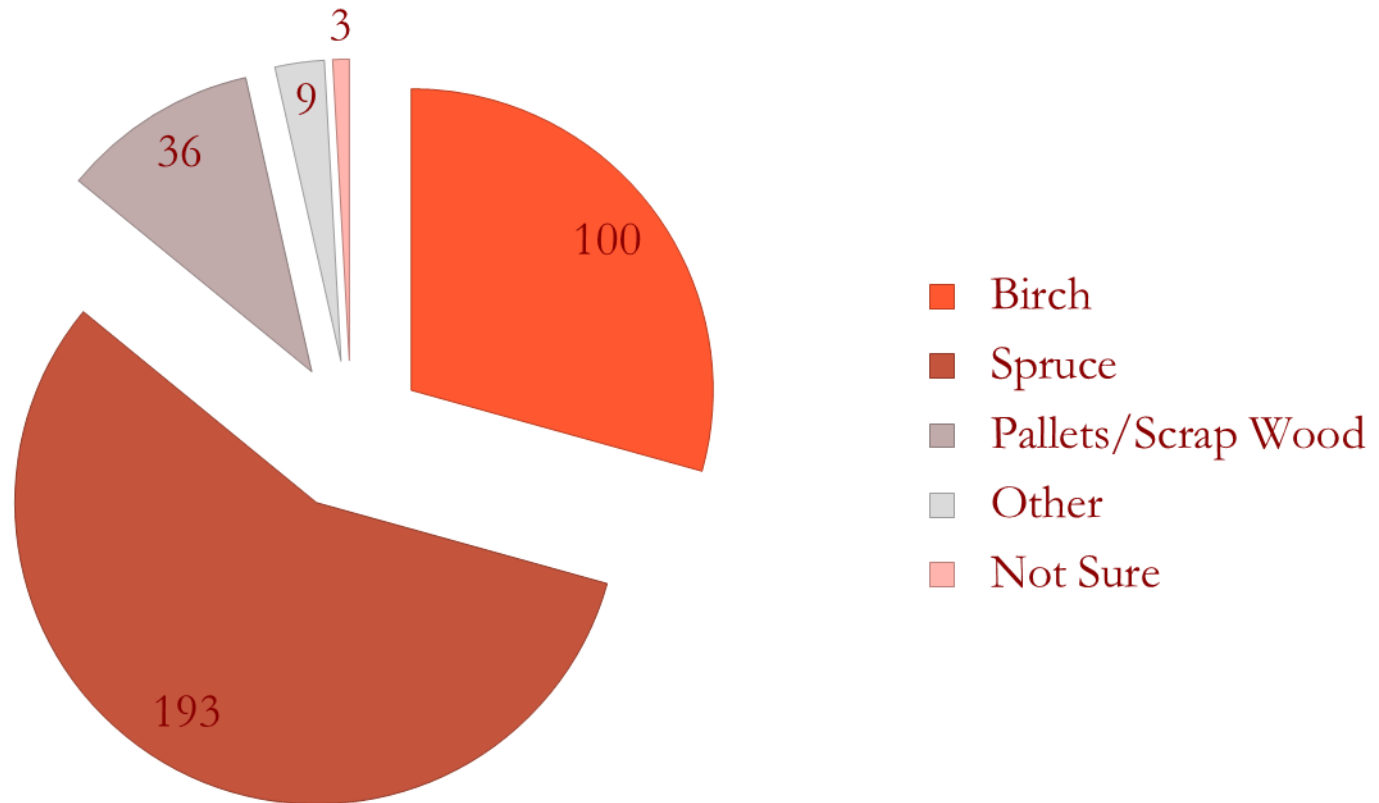


■ Primary	28	109	48	42	115	39
■ Secondary	11	54	37	18	64	17

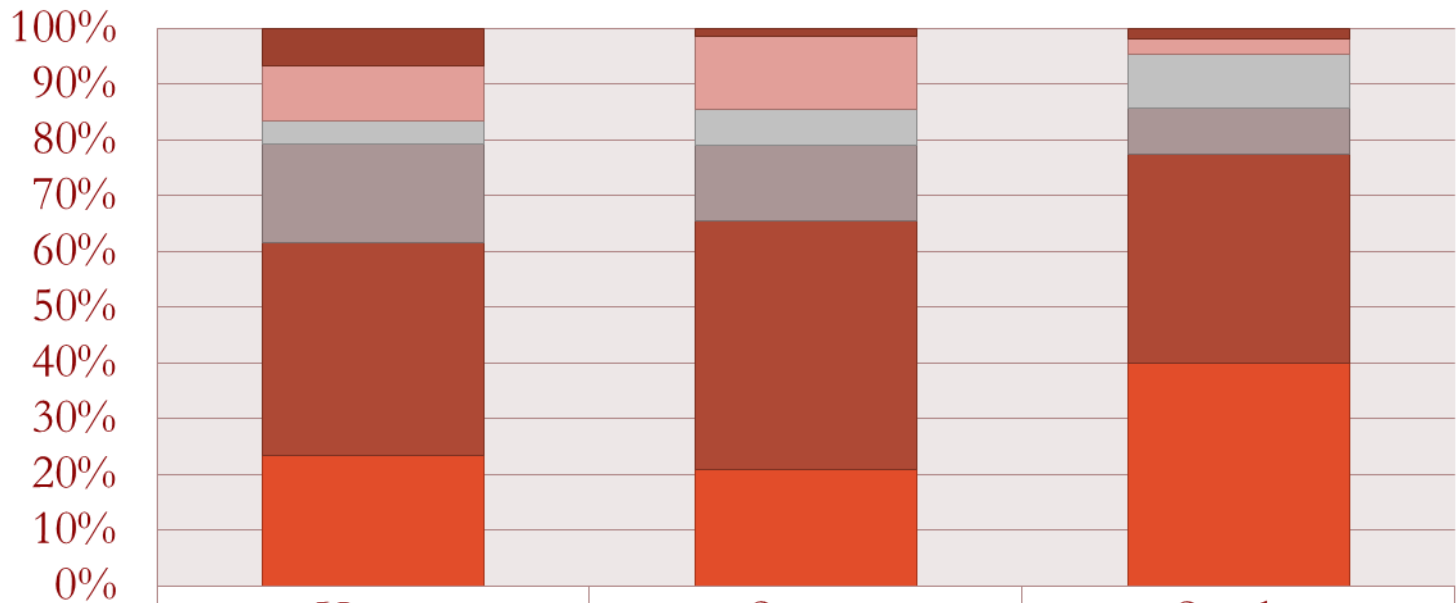
Are You Familiar with EPA Certified Wood Stoves?



Heating Sources for Home

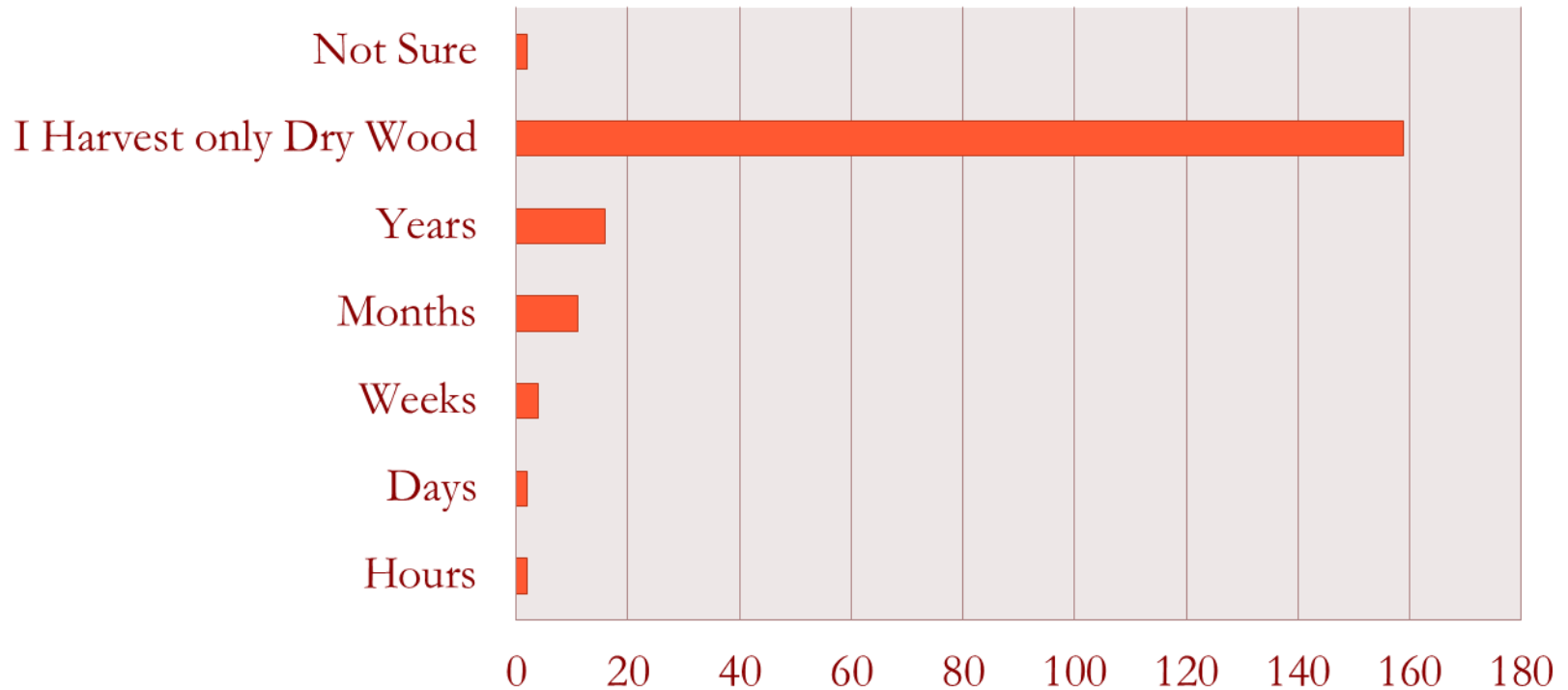


How Far Do They Travel to Get Wood?



■ Not Sure	13	2	3
■ Buy my wood	19	18	4
■ 20 miles or more	8	9	15
■ 11 to 20 miles	34	19	13
■ 5 to 10 miles	74	62	58
■ 5 miles or less	45	29	62

How Long Do You Season Your Wood?

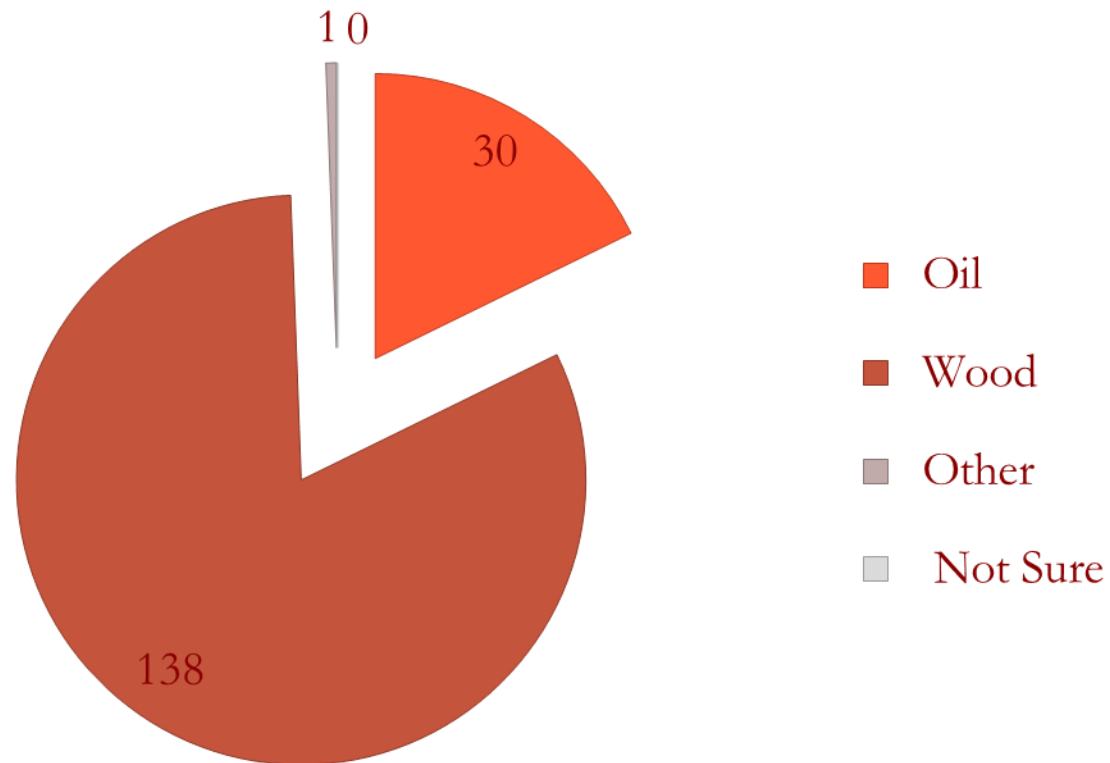


	Hours	Days	Weeks	Months	Years	I Harvest only Dry Wood	Not Sure
Series1	2	2	4	11	16	159	2

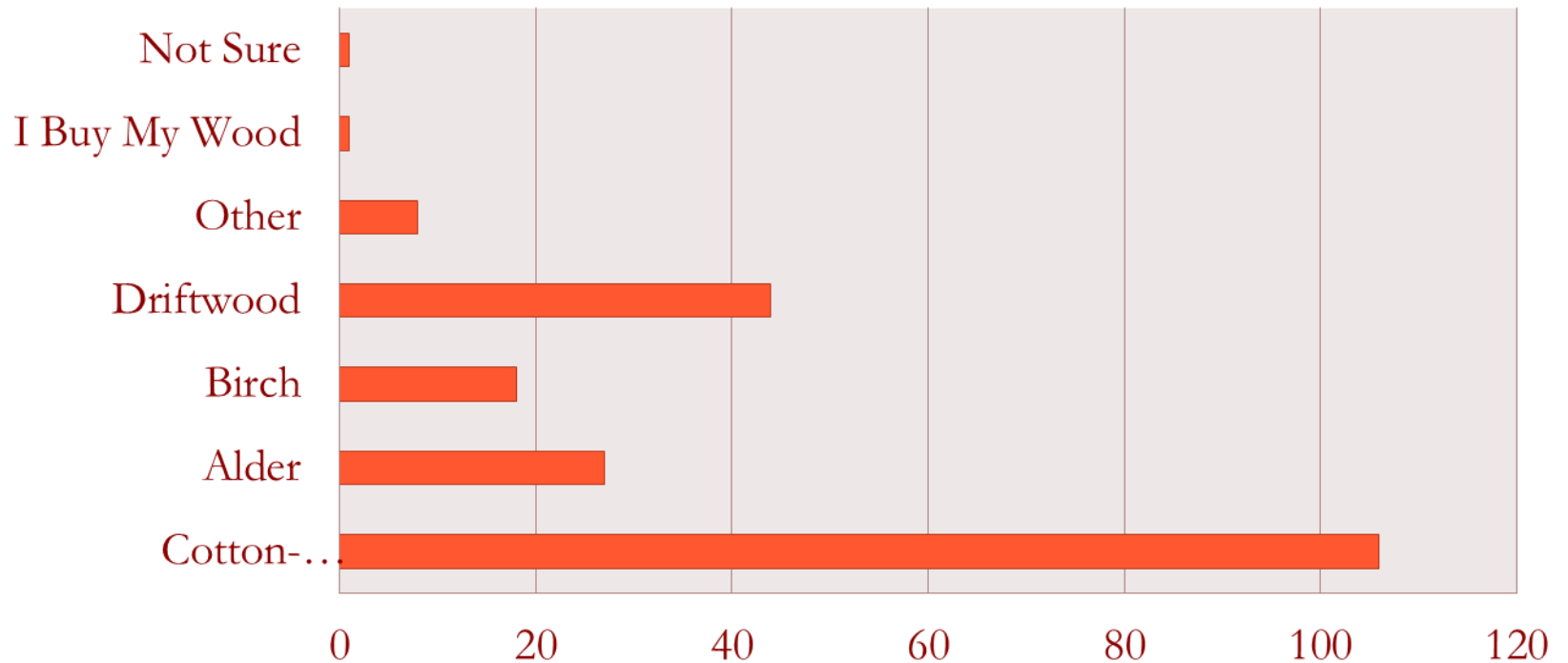
How Much Wood Have You Burned in the Past Year?

Cords	947
Average	5.5
Median	4
Mode	3
Pounds	0
Don't Know/Not Sure	0
Total Responses	171

Heating Sources for Steam Bath

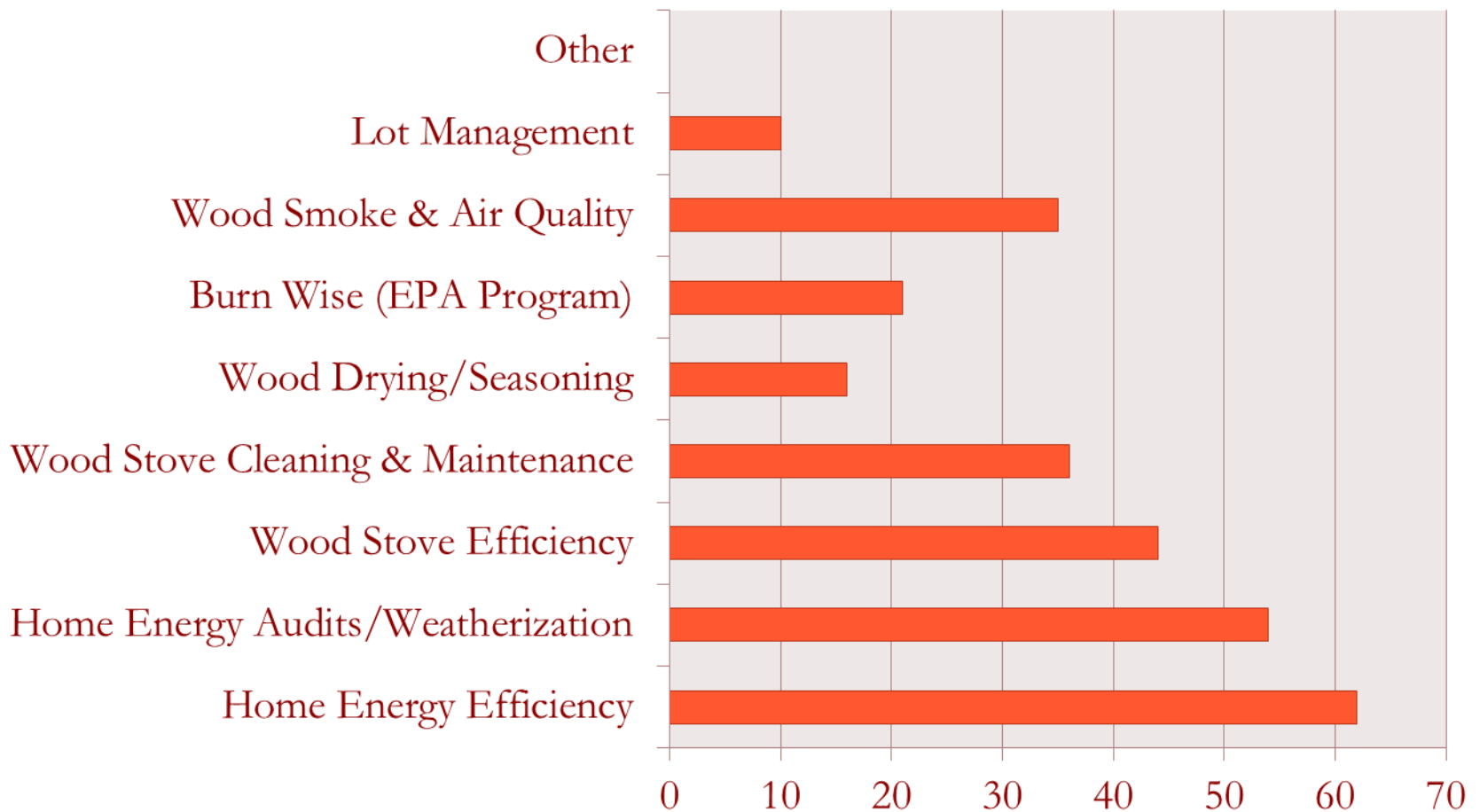


Heating Sources for Smoke House



	Cotton-wood	Alder	Birch	Driftwood	Other	I Buy My Wood	Not Sure
Series1	106	27	18	44	8	1	1

Fact Sheets Distributed



Some of the Questions, Concerns, Comments from Respondents

- What is an EPA certified stove?
- When are we going to run out of wood?
- A lot of spruce bark beetle kill – more of this should be harvested
- This is a good survey, especially when we receive information (fact sheets) too!

Miles & Gifts!

Tina logged 1,548.4 miles and just about lived in her car for three months!



What your car looks after a long day of conducting surveys!

You also get some really nice gifts and some very strange gifts!



African Violet



Shellacked
Moose Turds

Survey Results will be used to:

- Assess the possibility of a wood stove change out program
- Tailor follow-up education and outreach programs
- Assist with research needed to determine sustainable harvest levels

Questions?

For more information about the project, contact:

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